

What is claimed is:

1. A system for providing to at least one user in a commercial establishment personalized information relevant to the commercial establishment, the system comprising:

at least one database comprising the personalized information;

at least one transmitter for transmitting the personalized information to a user; and

at least one receiver for receiving, storing, and displaying the personalized information to the user.

2. The system as recited in claim 1, wherein the personalized information is derived from the user's past purchases.

3. The system as recited in claim 1, wherein the personalized information is the shopping list.

4. The system as recited in claim 1, wherein the personalized information is derived from the user's demographic profile.

5. The system as recited in claim 1, wherein the system further comprises a means for accessing the personalized information from the at least one database.

6. The system as recited in claim 5, wherein the means for accessing the personalized information comprises a personal identification number and associated passphrase.

7. The system as recited in claim 5, wherein the means for accessing the personalized information comprises a loyalty card that is input into a portable display unit.

8. A system for providing personalized information to a user in a commercial establishment, comprising:

at least one database comprising personalized information;

a location tracking system;

at least one transmitter for transmitting the personalized information to the user; and

at least one receiver for receiving, storing, and displaying personalized information;

wherein the at least one transmitter is in communication with the location tracking system and the location tracking system is in communication with the receiver.

9. The system as recited in claim 8, wherein the personalized information is at least one selected from a group comprising targeted advertisements, health information, nutritional information, promotional offers, offers on sale items, offers on discounted items, information on similar or associated items, manufacturer's coupons, storewide coupons, information on user specific favorite items, and information on user specific staple items.

10. The system as recited in claim 8, wherein the personalized information is provided based on a user's precise location with respect to the

commercial establishment, wherein the user's precise location has been calculated by the location tracking system.

11. The system as recited in claim 8, wherein the location tracking system further comprises:

at least one transmitter for transmitting position data relating to at least one portable display unit.

at least one receiver for receiving position data relating to the at least one portable display unit; and

a position calculating system for calculating the precise location of the at least one portable display unit with respect to the commercial facility using position data therefrom.

12. The system as recited in claim 11, wherein the location tracking system calculates the precise location of the at least one portable display unit with respect to the commercial establishment by at least one of biangulation or triangulation..

13. The system as recited in claim 11, wherein position data includes a radio frequency (RF) identification signal.

14. The system as recited in claim 11, wherein position data includes an infrared identification signal.

15. The system as recited in claim 8, wherein the at least one receiver includes a plurality of transceivers located at discrete locations throughout the commercial establishment.

16. The system as recited in claim 8, wherein the at least one receiver includes a plurality of transponders located at discrete locations throughout the commercial establishment.

17. The system as recited in claim 8, wherein the means for transmitting personalized information to the user comprises a wireless local area net.

18. The system as recited in claim 8, wherein the at least one receiver comprises at least one transceiver that is in communication with a portable display unit.

19. The system as recited in claim 18, wherein the portable display unit includes at least one database, a user interface, a display screen, and associated software to allow the portable display unit to receive, store, and display personalized information in a format that is readable by humans.

20. The system as recited in claim 8, further comprising a means for accessing the personalized information.

21. The system as recited in claim 20, wherein the means for accessing the personalized information comprises a personal identification number and associated password that are input into a portable display unit.

22. The system as recited in claim 20, wherein the means for accessing the personalized information comprises a loyalty card that is input into a portable display unit.

23. A method of providing personalized information to at least one user in a commercial establishment, comprising the steps of:

providing at least one database of personalized information;

and

transmitting personalized information contained in at the least one database to the at least one user.

24. The method as recited in claim 23, further comprising the step of receiving, saving, and displaying the personalized information.

25. The method as recited in claim 23, further comprising the step of calculating a precise location of the at least one user in the commercial establishment, wherein the personalized information transmitted is related to the at least one user's precise location with respect to items for purchase within the commercial establishment.

26. The method as recited in claim 25, wherein calculating the precise location of the at least one user, having a portable display unit with an identification signal, in the commercial establishment further comprises the steps of:

transmitting position data relating to each portable display unit;

receiving position data relating to each portable display unit; and

calculating the at least one user's precise location by one of biangulation and triangulation using the received position data of each portable display unit.

27. The method as recited in claim 23, wherein the method further comprises the steps of:

accessing personalized information from the at least one database;  
and

determining associated personalized information to transmit based on the at least one user's calculated precise location.

28. The method as recited in claim 27, wherein accessing personalized information includes authenticating a loyalty card, wherein the loyalty card is input into a portable display unit by the at least one user.

29. The method as recited in claim 27, wherein accessing personalized information includes authenticating a personal identification number and associated password, wherein the personal identification number and associated password are input into a portable display unit by the at least one user.

30. A system for determining a precise location of at least one user with respect to a commercial establishment, wherein the precise location is calculated by at least one of biangulation and triangulation techniques, the system comprising:

at least one transmitter for transmitting position data relating to at least one portable display unit to a receiver;

at least one receiver for receiving position data relating to the at least one portable display unit from the at least one transmitter; and

a position calculating system for calculating the precise location of the at least one portable display unit using the position data.

31. The system as recited in claim 30, wherein the at least one receiver includes a plurality of transceivers that are located at discrete locations throughout the commercial establishment.

32. The system as recited in claim 30, wherein the at least one receiver includes a plurality of transponders that are located at discrete locations throughout the commercial establishment.

33. The system as recited in claim 30, wherein position data includes a radio frequency (RF) identification signal.

34. The system as recited in claim 30, wherein position data includes an infrared identification signal.

35. A device for determining the precise location of at least one user in a commercial establishment, each user having a portable display unit, the device comprising:

at least one receiver for receiving position data relating to each portable display unit; and

a position calculating system for calculating the precise location of the at least one user using position data relating to each portable display unit.

36. The device as recited in claim 35, wherein the position calculating system comprises one of biangulation and triangulation.

37. The device as recited in claim 35, wherein position data relating to each portable display unit includes a radio frequency identification signal from each portable display unit, having a transmitter therefor.

38. The device as recited in claim 35, wherein position data relating to each portable display unit includes an infrared identification signal from each portable display unit, having a transmitter therefor.

39. The device as recited in claim 35, wherein the at least one receiver includes a plurality of transceivers that are located at discrete locations throughout the commercial establishment.

40. The device as recited in claim 35, wherein the at least one receiver includes a plurality of transponders that are located at discrete locations throughout the commercial establishment.

41. A method for determining the precise location of at least one user in a commercial establishment, each user having a portable display unit, the steps of the method comprising:

receiving position data relating to at least one portable display unit;

and

calculating the precise location of the at least one portable display unit.



42. The method as recited in claim 41, wherein the step of calculating the precise location of the at least one portable display unit further comprises calculating the precise location using position data from at least three sources of known location using triangulation techniques.

43. The method as recited in claim 41, wherein the step of calculating the precise location of the at least one portable display unit further comprises calculating the precise location using position data from two sources of known location using biangulation techniques.